

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for cooling a fuel cell system having a fuel cell, which comprises an anode space, to which a hydrogen-containing gas is fed, and a cathode space, to which an oxygen-containing gas is fed via an air intake system, a cooling device, which forms part of a cooling circuit through which a liquid coolant is passed, being arranged at least in the fuel cell, ~~characterized in that~~ comprising:

separating gaseous constituents contained in the liquid coolant; and
~~are separated off in the cooling circuit outside the fuel cell and fed to the air intake system via a discharge passage which does not include any ignition sources for an ignitable gas mixture~~ providing an ignition source free discharge path for separating gaseous constituents contained in the liquid coolant wherein said ignition free discharge path is provided external to said fuel cell is fed to the air intake system.

2. (Currently Amended) The method as claimed in claim 1, ~~characterized in that~~ wherein coolant which emerges from the an exit of the cooling device of the fuel cell is fed to a calming vessel, from which gas is discharged at a preset excess-pressure level, the gas being fed via the discharge passage to the mass flow of oxygen-containing gas of the air intake system, and which is closed when the pressure drops below the excess pressure level, in order to prevent gas from escaping to the discharge passage.

3. (Currently Amended) The method as claimed in claim ~~1 or 2~~, ~~characterized in that~~ any 1, wherein gas which is present in the liquid coolant is

separated out of the coolant upstream of the calming vessel by means of a vent line and is then fed into the calming vessel.

4. (Currently Amended) The method as claimed in ~~at least one of the from the preceding claims, characterized in that~~ claim 1, wherein gases 12 discharge passage are fed to the mass flow of air in the region of an air filter of the air intake system.

5. (Currently Amended) The method as claimed in ~~at least one of the preceding claims, characterized in that~~ claim 1, wherein the hydrogen content of the exhaust gases from the fuel cell is monitored using a hydrogen sensor, and in that when a preset limit value for the gas content is reached the concentration of hydrogen in the exhaust gas is reduced to below the threshold value by admixing hydrogen-free gas.

6. (Currently Amended) The method as claimed in ~~at least one of the preceding claims, characterized in that the~~ claim 1, wherein exhaust gases from the fuel cell are passed over a catalyst, by means of which the hydrogen concentration In the exhaust gases is reduced.

7. (Currently Amended) The method as claimed in ~~at least one of the preceding claims, characterized in that~~ claim 1, wherein a compressor in the air intake system for feeding air into the fuel cell remains switched on after the fuel cell has been switched off and the circulation of coolant has been shut down, so that it continues running for a predeterminable period of time.

8. (Currently Amended) The method as claimed in ~~at least one of the preceding claims, characterized in that~~ claim 2, wherein the calming vessel is purged with air before the coolant circuit is started up.

9. (Currently Amended) An apparatus for cooling a fuel cell system having a fuel cell~~[[,]]~~ which ~~comprises~~ includes an anode space, to which a hydrogen-containing gas is fed, and a cathode space, to which an oxygen-containing gas is fed via an air intake system, a cooling device, which forms part of a cooling circuit through which a liquid coolant is passed, being arranged at least in the fuel cell, ~~characterized in that said system further including~~

a calming vessel ~~(23)~~ for the liquid coolant with a gas collection region ~~(22)~~ ~~is connected downstream of the~~ an outlet ~~(19)~~ or exit of the cooling device ~~(15)~~ of the fuel cell ~~(1)~~, ~~in that~~;

a gas outlet valve ~~(25)~~ ~~is arranged at the~~ a gas collection region ~~(22)~~, ~~which said valve can be able to~~ be actuated at a predeterminable gas volume or gas pressure in the calming vessel ~~(23)~~ and ~~on the exit side~~ an outlet of said valve is connected, via ~~a~~ an ignition source free discharge passage ~~(26)~~ ~~which does not include any ignition sources for an ignitable gas mixture, to the intake system for of~~ the oxygen-containing gas.

10. (Currently Amended) The apparatus as claimed in claim 9, ~~characterized in that further including~~ a vent line ~~(20)~~ ~~is arranged between the exit or outlet (19) of the cooling device (15) of the fuel cell (1) and the gas collection region (22) of the calming vessel (23).~~

11. (Currently Amended) The apparatus as claimed in claim ~~9 or 10~~, ~~characterized in that 9, wherein~~ the discharge passage ~~(26)~~ which leads away from the calming vessel ~~(23)~~ opens out in the gas intake system for the oxygen-containing gas in the region of a gas filter ~~(12)~~.

12. (Currently Amended) The apparatus as claimed in ~~at least one of claims 9 to 11~~, ~~characterized in that~~ claim 9, further including a sensor ~~(37)~~ for measuring the fuel gas content in the exhaust-gas stream ~~is provided in the~~ an

exhaust pipe (37) for the reaction products of the fuel cell (1) and is, said sensor being connected to a control unit (36), in which a limit value for the fuel gas content in the exhaust-gas stream is set and by which a valve (38) in an entry to the exhaust pipe (37) ~~can be~~ is controlled, which valve opens up an opening for admixing air to the exhaust-gas stream when ~~the~~ a limit value is reached.

13. (Currently Amended) The apparatus as claimed in ~~at least one of claims 9 to 12, characterized in that~~ claim 12, further including a catalyst within the exhaust pipe for reducing the fuel gas in the exhaust-gas stream ~~is present within the exhaust pipe (37).~~

14. (Currently Amended) The apparatus as claimed in ~~at least one of claims 9 to 13, characterized in that~~ claim 9, wherein the calming vessel (23), the gas outlet valve (25) and the gas discharge passage (26) consist of antistatic materials.

15. (Currently Amended) The apparatus as claimed in ~~at least one of claims 9 to 14, characterized in that~~ claim 9, further including a moisture separator (27) made from antistatic material ~~is arranged within the discharge passage (26).~~

16. (Currently Amended) The apparatus as claimed in ~~at least one of claims 9 to 14, characterized by its arrangement~~ claim 9, wherein said fuel system is positioned in a mobile device.

17. (New) The apparatus as claimed in claim 10, wherein the discharge passage which leads away from the calming vessel opens out in the gas intake system for the oxygen-containing gas in the region of a gas filter.

18. (New) The apparatus as claimed in claim 10, further including a sensor for measuring the fuel gas content in the exhaust-gas stream provided in an exhaust pipe for reaction products of the fuel cell, said sensor being connected to a control unit, in which a limit value for the fuel gas content in the exhaust-gas stream is set and by which a valve in an entry to the exhaust pipe is controlled, which valve opens up an opening for admixing air to the exhaust-gas stream when a limit value is reached.

19. (New) The apparatus as claimed in claim 11, further including a sensor for measuring the fuel gas content in the exhaust-gas stream provided in an exhaust pipe for reaction products of the fuel cell, said sensor being connected to a control unit, in which a limit value for the fuel gas content in the exhaust-gas stream is set and by which a valve in an entry to the exhaust pipe is controlled, which valve opens up an opening for admixing air to the exhaust-gas stream when a limit value is reached.

20. (New) An apparatus for cooling a fuel cell system having a fuel cell which includes an anode space to which a hydrogen-containing gas is fed, and a cathode space to which an oxygen-containing gas is fed via an air intake system, a cooling device, which forms part of a cooling circuit through which a liquid coolant is passed, being arranged at least in the fuel cell, said system further including;

a gas outlet valve arranged at a gas collection region, said valve able to be actuated at a predeterminable gas volume or gas pressure and an outlet of said valve is connected, via an ignition source free discharge passage, to the intake system of the oxygen-containing gas.